

M/035/002

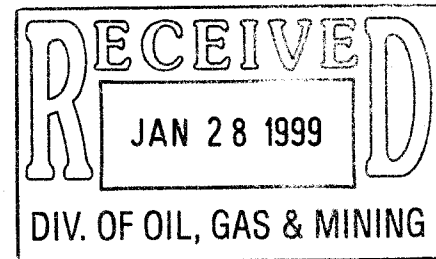
Kennecott Utah Copper Corporation  
8315 West 3595 South  
P.O. Box 6001  
Magna, Utah 84044-6001  
Tel: (801) 252-3257  
Fax: (801) 252-3125

**Paula H. Doughty**  
Manager, Environmental Compliance

**Kennecott**

January 27, 1999

Mr. Wayne Hedberg, Permit Supervisor  
Minerals Reclamation Program  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801



**Subject: Annual Reports for 1998, Kennecott Utah Copper Corporation**

Dear Mr. Hedberg:

Enclosed are the completed Kennecott Utah Copper Corporation (KUCC) annual report forms for the following DOGM permits:

M/035/002	Bingham Pit and UCD Modernization,
M/035/011	4th Line/Copperton Concentrator,
M/035/015	North Impoundment,
M/045/004	Pine Canyon Reclamation Project.

Color aerial photographs of the entire Oquirrh Mountain Range were taken at a nominal scale of 1:24,000 on August 5, 1998. These photographs were used in conjunction with a 1:24,000 scale base map to make revised estimates of disturbed areas within each permit boundary. Also, in this year's reports, all disturbed and reclaimed acreage on the existing tailings impoundment is reported under permit number M/035/002.

In addition to the reclamation activities documented in the attached reports, the following work was conducted by KUCC in the Oquirrh Mountains outside of the DOGM jurisdictional boundaries:

Refinery area - approximately 16 acres were fertilized or treated with biosolids and seeded.

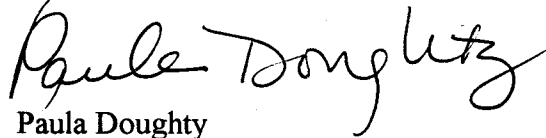
In 1998 KUCC spent more than \$300,000 on reclamation activities within the boundaries of permit #M/035/002. These costs included purchases of seed, fertilizer, mycorrhizae and trees, seedbed preparation, application and planting. Excluded from these costs are such activities as

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contaminated soil removals, major recontouring efforts and soil emplacement which were paid for by the individual construction and remediation projects. After correcting for inflation, this equates to more than \$120,000 spent in 1978 dollars. This is well in excess of the \$50,000 annual expenditure required by permit #M/035/002.

If you have any questions about these annual reports, please contact Rich Borden at 569-6208.

Sincerely,

A handwritten signature in cursive script that reads "Paula Doughty". The signature is written in dark ink and is positioned above the printed name and title.

Paula Doughty  
Manager, Environmental Compliance

Enclosures

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS AND MINING**  
1594 West North Temple Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
Telephone: (801) 538-5291  
Fax: (801) 359-3940

**ANNUAL REPORT OF MINING OPERATIONS**

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, as amended, and the General Rules as promulgated under the Utah Minerals Regulatory Program. An operator conducting mining operations under a Notice of Intention must file an annual operations and progress report (FORM MR-AR) with the Division.

**I.        General Information**

1.    Report Time Period: From (mo./yr.) **1/98** To (mo./yr.) **12/98**
2.    DOGM File Number (Mine No.): **M/035/002**
3.    Mine Name: **Bingham Pit & UCD Modernization**
4.    Mineral(s) Mined (or permitted to mine): **Copper and associated metals.**
5.    Type of mine: ☒ Surface Mine or ☐ Underground Mine
6.    Legal Description, (Location of Lands Affected):

Sections 7, 8, 9, 10, 11, 17, 18, 19, 20, 21, 30, & 32 .....T1S, R2W;  
Sections 9, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26 & 36.....T1S, R3W;  
Sections 4, 5, 9, 10, 11, 14, 15, 22, 23, 27 & 33.....T2S, R2W;  
Sections 7, 17, 18 & 19.....T3S, R1W;  
Sections 4, 8, 9, 13, 14, 15, 16, 17, 19, 20, 21, 24, 25,  
28, 29, 30, 31, & 32.....T3S, R2W;  
Sections 11, 12, 13, 14, 15, 21, 22, 23, 24, 25, 26, 27,  
33, 34, 35 & 36.....T3S, R3W;  
Sections 6 & 7.....T4S, R2W;  
Sections 1, 2, 3, 11 & 12.....T4S, R3W;

Salt Lake Base and Meridian, Salt Lake County, Utah

7. Name of Operator or Company: Kennecott Utah Copper Corporation
8. Permanent Street Address: P. O. Box 6001  
City, State, Zip: 8315 W. 3595 South  
Magna, UT 84044  
Phone: (801) 252-3257
9. Company Representative (or designated operator):  
Name: Paula Doughty  
Title: Manager, Environmental Compliance  
Business Address: P. O. Box 6001  
City, State, Zip: Magna, UT 84044  
Phone: (801) 252-3257

\_\_\_ Please check if any of the above information has changed since previous year.

II. Mining and Reclamation

1. Was the mine active during the past year? Yes X No \_\_\_

2. If active, how much ore or mineral was mined?

58.1 million short tons

3. How much additional acreage was disturbed during the past year?

Approximately 64 acres were disturbed by waste rock disposal activities and 580 acres were disturbed on the tailings impoundment.

4. Briefly describe any new or additional surface disturbances that occurred during the past year. This description should include the type of work performed, and volume of material moved.

Approximately 64 acres were disturbed by waste rock disposal activities in Bingham Canyon as the disposal area was extended down the north wall of the canyon. Construction activities and routine operations on the existing tailings embankment redisturbed about 580 previously reclaimed acres. As described below, much of this acreage was also reclaimed in 1998.

5. How much acreage was reclaimed during the past year?

In 1998, 621 acres were reclaimed by minor recontouring and/or soil modification and about 621 acres were seeded and fertilized.

6. Briefly describe the reclamation work performed during the past year. This description should include methods employed, and an evaluation of the results.

The following reclamation activities were completed in 1998:

Mine Access Road	8 acres on slopes above the road were treated with lime to adjust the soil pH 8 acres were seeded
Eastside Drainages	24 acres were seeded 5000 trees were planted
NE Corner of Tailings Impoundment Stepback	9 acres were removed from the active tailings pond and leveled or recontoured. 9 acres were seeded
SE Corner of Tailings Impoundment	140 acres were slightly recontoured 140 acres had biosolids and mycorrhizae applied and were pit seeded
Disturbed areas on Tailings Impoundment	440 acres were slightly recontoured 440 acres were seeded for dust control

Most seeded areas were also treated with fertilizer. It should be noted that the areas that were seeded in the spring had shown vigorous growth and successful establishment by late fall. Those areas seeded in the fall of 1998 will be evaluated in the spring of 1999.

7. What is the total disturbed acreage at years end?

Based upon the results of an aerial photographic survey flown on August 5, 1998, the total disturbed acreage within the permit boundaries is 13,260 acres. It should be noted that this disturbed area includes approximately 1230 acres on the tailings pond embankment which have undergone interim reclamation for dust control.

8. Briefly summarize any mining and/or reclamation plans for the upcoming year.

The 1999 Reclamation Activities Plan is being prepared and will be submitted to the Division by February 28, 1999.

**NOTE:** Section III., "Additional Information" applies only to large mining operations.

III. Additional Information

1. An updated surface facilities map should be attached if there have been significant changes since the previous map was submitted.

No new maps are attached because there have been no significant changes since the previous maps were submitted last year.

2. Any monitoring results or other reports that are required under the terms of the approved notice of intention should also be submitted.

The 1999 Reclamation Activities Plan will be submitted to the Division by February 28, 1999.

IV. Signature Requirement

I hereby certify that the foregoing is true and correct.

Name (Typed or Print): Paula Doughty

Title of Operator: Manager, Environmental Compliance

Signature of Operator: Paula Doughty

Date: 1/26/99